



Practitioner's Docket No. MSU 4.1-568

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Thomas J. Pinnavaia, Wenzhong Zhang and Yi Liu

Application No.: 10/ 025,647 Group No.: 1755  
Filed: December 19, 2001 Examiner: David R. Sample  
For: ULTRASTABLE POROUS ALUMINOSILICATE STRUCTURES AND COMPOSITIONS  
DERIVED THEREFROM

☐ \*Patent No.: \_\_\_\_\_ Issue Date: \_\_\_\_\_  
Reexamination No.: \_\_\_\_\_

\*NOTE: Preferably also insert inventor's name and invention title.

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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TC 1700

TERMINAL DISCLAIMER TO OBVIATE  
A DOUBLE PATENTING REJECTION (37 C.F.R. § 1.321(c))

Identification of Person(s) Making This Disclaimer

I, Paul M. Hunt  
(type or print names of all inventors or assigns or name of attorney signing disclaimer)

(a) represent that I am

- ☐ an inventor (applicant) of this invention.  
☐ an assignee of this invention.

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\*

(When using Express Mail, the Express Mail label number is mandatory;  
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

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- ☒ deposited with the United States Postal Service in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

37 C.F.R. § 1.8(a)

37 C.F.R. § 1.10 \*

- ☒ with sufficient postage as first class mail. ☐ as "Express Mail Post Office to Addressee"  
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TRANSMISSION

- ☐ facsimile transmitted to the Patent and Trademark Office, (703) \_\_\_\_\_

Jessica R. House  
Signature

Date: 01/29/2004

Jessica R. House  
(type or print name of person certifying)

\* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

(Terminal Disclaimer to Obviate a Double Patenting Rejection [9-4]—page 1 of 5)

02/06/2004 MDAHTE1 00000097 10025647

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55.00 OP

**WARNING:** "If the patent or patent application is assigned to an organization, such as a corporation, partnership, university, [g]overnment agency or similar entity, and the disclaimer is signed by the assignee, the assignee must comply with § 3.73(b)." Notice of Oct. 15, 1993, 1156 O.G. 54-61 at 56, § 1490, M.P.E.P., 7th Edition.

☒ a representative authorized to sign on behalf of the assignee identified below.

☒ A statement under 37 C.F.R. § 3.73(b) is attached.

**WARNING:** See the above "WARNING."

☐ the attorney of record for this invention.

**NOTE:** The rules "permit an attorney or agent of record to sign a terminal disclaimer without the need to comply with § 3.73(b)." Notice of Oct. 15, 1993, 1156 O.G. 54-61, at 56. See also § 1490, M.P.E.P., 7th Edition.

### **IDENTITY OF ASSIGNEE AND TITLE OF DISCLAIMER**

(if applicable)

The assignee is

Name of assignee Board of Trustees operating  
Michigan State University

Address of assignee 238 Administration Building  
East Lansing, Michigan 48824

Title of disclaimant authorized to sign on behalf of assignee Associate Vice  
President for Research and Graduate Studies

### **EXTENT OF DISCLAIMER'S INTEREST**

The extent of the interest in this invention that the disclaimant owns is:

☒ the whole of this invention.

☐ a sectional interest in this invention, as follows:

**NOTE:** Disclaimers from the whole interest must be filed.

(state the exact interest of the disclaimant)

The disclaimant(s) is/are:

☐ the applicant(s)

☒ the assignee(s)

**RECORDAL OF ASSIGNMENT IN PTO**

*(if applicable)*

☒ The assignment was recorded on 02/11/2002

Reel 012604

Frame 0580

☐ Authorization for recordal of the assignment is separately attached.

☐ A separate ☐ "ASSIGNMENT (DOCUMENT) COVER SHEET" or  
☐ FORM PTO 1595 is also attached.

**ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION**

*(if applicable)*

☒ Attached is a STATEMENT UNDER 37 C.F.R. § 3.73(b) establishing the right of the assignee to take action in this case.

*NOTE: Insert the appropriate page 3.*

# **DISCLAIMER**

## **( Obviousness-Type Double Patenting Rejection Over A Prior Patent)**

Petitioner(s) hereby disclaims, except as provided below, the terminal part of any patent granted on the instant application, which would extend beyond the expiration date of Patent No. 6,585,952 B1 as presently shortened by any terminal disclaimer. Petitioner(s) hereby agree(s) that any patent so granted on the instant application shall be enforceable only for and during such period that it and the above-listed patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors, or assigns.

In making the above disclaimer, disclaimant does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. §§ 154 to 156 and 173 of the patent forming the basis of the double patenting rejection, namely, Patent No.: 6,585,952 B1, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. § 1.321, has all claims cancelled by a reexamination certificate, is reissued, or is in any manner terminated prior to expiration of its full statutory term as presently shortened by any terminal disclaimer, except for the separation of legal title stated above.

### **DISCLAIMER FEE (37 C.F.R. § 1.20(d))**

- ☐ Other than a small entity — fee \$110.00
- ☒ Small entity — fee \$55.00
  - ☐ Small entity statement attached
  - ☒ Small entity statement already filed
    - ☒ in patent application 10 / 025,647  
on 12/19/2001 (Date)

**FEE PAYMENT**

- ☐ Fee already paid.
- ☒ Attached is a ☒ check ☐ money order in the amount of \$ 55
- ☐ Authorization is hereby made to charge the amount of \$ \_\_\_\_\_
- ☐ to Deposit Account No. \_\_\_\_\_
- ☐ to Credit card as shown on the attached credit card information authorization form PTO-2038.

**WARNING:** Credit card information should **not** be included on this form as it may become public.

- ☒ Charge any additional fees required by this paper or credit any overpayment ~~in the manner authorized above.~~ to Deposit Account 13-0610

A duplicate of this paper is attached.



Signature of disclaimant

Date:

SIGNATURE OF PRACTITIONER OF RECORD

Reg. No.:

(type or print name of practitioner)

Customer No.:

P.O. Address

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Thomas J. Pinnavaia, Wenzhong Zhang and Yi LiuApplication No./Patent N. : 10/025,647 Filed/Issue Dat : December 19, 2001Entitled: ULTRASTABLE POROUS ALUMINOSILICATE STRUCTURES AND COMPOSITIONS DERIVED THEREFROMBoard of Trustees operating Michigan State University, a University

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or2. ☐ an assignee of less than the entire right, title and interest.The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 012604, Frame 0580, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

January 22, 2004  
Date(517) 355-2186

Telephone number

Paul M. Hunt

Typed or printed name

Paul M. Hunt

Signature

Associate Vice President For  
Research and Graduate Studies  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES  
PATENT AND  
TRADEMARK OFFICE



41568

APRIL 22, 2002

MCLEOD & MOYNE, P.C.  
IAN C. MCLEOD  
2190 COMMONS PARKWAY  
OKEMOS MI 48864

Chief Financial Officer and Chief Administrative Officer  
Washington, DC 20231  
www.uspto.gov

PTAB  
**RECEIVED**

APR 26 2002

IAN C. MCLEOD



\*101994919A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/11/2002

REEL/FRAME: 012604/0580

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

PINNAVAIA, THOMAS J.

DOC DATE: 12/18/2001

ASSIGNOR:

ZHANG, WENZHONG

DOC DATE: 01/02/2002

ASSIGNOR:

LIU, YU

DOC DATE: 12/18/2001

ASSIGNEE:

BOARD OF TRUSTEES OPERATING  
MICHIGAN STATE UNIVERSITY  
238 ADMINISTRATION BLDG.  
EAST LANSING, MICHIGAN 48824

SERIAL NUMBER: 10025647

PATENT NUMBER:

FILING DATE: 12/19/2001

ISSUE DATE:

SHAREILL COLES, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS





## ASSIGNMENT

WHEREAS, We, Thomas J. Pinnavaia, Wenzhong Zhang and Yu Liu, residing at 5901 Sleepy Hollow, East Lansing, Michigan 48823; 1124 S. Tamarack Avenue, Broken Arrow, Oklahoma 74012; and 1644 F Spartan Village, East Lansing, Michigan 48823, respectively, have invented certain new and useful improvements in ULTRASTABLE POROUS ALUMINOSILICATE STRUCTURES AND COMPOSITIONS DERIVED THEREFROM for which an application for United States Letters Patent was filed on December 19, 2001 and assigned Serial No. 10/025,647; and

WHEREAS, Board of Trustees, a constitutional Corporation operating Michigan State University, (hereinafter referred to as Assignee) of East Lansing, State of Michigan is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, the receipt whereof is hereby acknowledged, and other valuable considerations, We the said Thomas J. Pinnavaia, Wenzhong Zhang and Yu Liu, have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations and extensions thereof.

We hereby authorize and request the Patent and Trademark Office officials in the United States and any and all foreign countries to issue any and all of said

Letters Patent, when granted to said Assignee as th  
assignee of our entire right, title and interest in and  
to the same for the sole use and behoof of the said  
Assignee, its successors and assigns.

FURTHER, We agree that we will communicate to  
said Assignee or its representatives any facts known to  
us respecting said invention, and testify in any legal  
proceeding, sign all lawful papers, execute all  
divisional, continuation, substitution, renewal and  
reissue applications, execute all necessary assignment  
papers to cause any and all of said Letters Patent to be  
issued to said Assignee, make all rightful oaths and  
generally do everything possible to aid said Assignee,  
its successors and assigns, to obtain and enforce proper  
protection for said invention in the United States and  
in any and all foreign countries.

IN TESTIMONY WHEREOF, I have hereunto set my  
hand this 18<sup>th</sup> day of December, 2001.

Signed in the Presence of:

[Signature]

Thomas J. Pinnavaia  
Thomas J. Pinnavaia

STATE OF MICHIGAN :

SS.

COUNTY OF INGHAM :

On this 18<sup>th</sup> day of December, 2001,  
personally appeared before me the above Thomas J.  
Pinnavaia, to me known and known to me to be the person  
described in and who executed the foregoing instrument  
and acknowledged the same to be his free act and deed in  
and for the purposes set forth in said instrument.

SEAL

Eileen J. McLeod  
Notary Public

My Commission Expires: \_\_\_\_\_

EILEEN J. McLEOD

Notary Public - Ingham County, MI  
My Commission Expires April 30, 2004

IN TESTIMONY WHEREOF, I have hereunto set my  
hand this 2 day of Jan., 2002.

Signed in the Presence of:

\_\_\_\_\_

Wenzhong Zhang  
Wenzhong Zhang

STATE OF OKLAHOMA :

SS.

COUNTY OF TULSA :

On this 2 day of JAN, 2002,  
personally appeared before me the above Wenzhong Zhang,  
to me known and known to me to be the person described  
in and who executed the foregoing instrument and  
acknowledged the same to be his free act and deed in and  
for the purposes set forth in said instrument.

SEAL

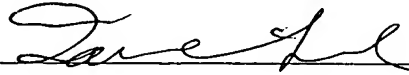

Lara A. Conover Beck  
Notary Public

My Commission Expires: \_\_\_\_\_

11-4-03

IN TESTIMONY WHEREOF, I have hereunto set my hand this 18 day of Dec., 2001.

Signed in the Presence of:

        
Yu Liu

STATE OF MICHIGAN :

ss.

COUNTY OF INGHAM :

On this 18<sup>th</sup> day of December, 2001, personally appeared before me the above named Yu Liu to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged the same to be her free act and deed in and for the purposes set forth in said instrument.

SEAL

  
Notary Public

My Commission Expires: \_\_\_\_\_

EILEEN J. McLEOD  
Notary Public - Ingham County, MI  
My Commission Expires April 30, 2004